



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/920,427	08/01/2001	Roy S. Krupp	012720-27	5909

22930 7590 12/23/2004

HOWREY SIMON ARNOLD & WHITE LLP
ATTEN: MARGARET P. DROSOS, DIRECTOR OF IP ADMIN
2941 FAIRVIEW PARK DR, BOX 7
FALLS CHURCH, VA 22042

EXAMINER

PATIDAR, JAY M

ART UNIT	PAPER NUMBER
----------	--------------

2862

DATE MAILED: 12/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/920,427

Applicant(s)

KRUPP, ROY S.

Examiner

Jay M. Patidar

Art Unit

2862

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7,8,13-17,19-22 and 24-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7,8,13,14 and 20 is/are allowed.
- 6) ☒ Claim(s) 15-17,19,21,22 and 24-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) ✓
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

1. This communication is in response to applicant's amendment filed on October 13, 2004.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15-17,19,21-22,24,25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicants' admitted prior art in view of Buzzell (4,045,738).

As to claims 15-16,21,25, applicants admitted prior art (AAPA) discloses an eddy current device for measuring characteristics of a nearby, moving electrically conductive object with an intervening barrier of material between the sensors and the object comprising: a permanent magnet for generating a stationary magnetic field, the magnet being mounted proximate and external to the barrier (a barrier can be interpreted as any material or a housing or an air gap or no intervening barrier as disclosed by applicant on para 0039) and sized and shaped so that the stationary magnetic field penetrates through the barrier and

can be intersected by the moving conductive object; a winding core comprising a magnetically permeable material generally coaxial with the magnet and a coil wound around the winding core so that a signal voltage can be produced on the coil in response to a variable magnetic field in the conductive object as the conductive object passes through the stationary magnetic field. AAPA fails to disclose the winding core being a rod mounted to a pole of the magnet distal from the barrier. Buzzell discloses a magnetic field sensing device with a uniaxial permanent magnet wherein the winding core 5 is a rod mounted to a pole of the magnet distal from the barrier or the object (Note fig. 1). Consequently, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of AAPA to have included the winding core being a rod with a uniaxial permanent magnet to generate stationary magnetic field as shown in Buzzell to increase and focus the penetration of magnet field in the object to increase the sensitivity of the coil.

As to claim 16, the magnet material in Buzzell is ALNICO (col. 1, line 35).

As to claim 26, Buzzell discloses the magnet being generally cylindrical and includes a central longitudinal axis that is generally perpendicular to the proximate barrier surface; the magnet is magnetized along the longitudinal axis, whereby the sensor is omnidirectional (figs. 1-3).

As to claims 17, 22, 27, the winding core 5 is a cylindrical rod.

As to claims 19,24,28, wherein the winding core is a cylindrical rod and the coil is wound around the magnet and the rod in Buzzell.

3. Claims 7,8,13-14,20 are allowed.
4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Note USPTO-892.
5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

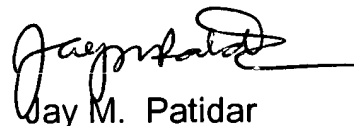
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will

the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jay M. Patidar whose telephone number is 571-272-2265. The examiner can normally be reached on M-Thur 7:00-5:30.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jay M. Patidar
Primary Examiner
Art Unit 2862
Email: Jay.Patidar@USPTO.gov

December 21, 2004